

WHAT IS CLAIMED IS:

1. An apparatus for reducing information propagating in a network environment, comprising:

5 a first network element operable to glean routing information being communicated by a second network element, the routing information being stored such that the routing information may be accessed, wherein the first and second network elements may cooperate in an adjacency protocol that allows for a data exchange
10 between the first and second network elements, and wherein the second network element does not communicate the routing information gleaned by the first network element during the data exchange associated with the adjacency protocol.

15

2. The apparatus of Claim 1, wherein the first network element includes a routing database that is operable to store the routing information.

20 3. The apparatus of Claim 2, wherein the first network element includes a general database, and wherein the first network element is operable to verify the routing information with the second network element such that verified information from the routing database may
25 be stored in the general database.

4. The apparatus of Claim 1, wherein the network element is a selected one of a group of elements consisting of:

- a router;
- 5 a switch;
- a loadbalancer;
- a processor;
- a bridge; and
- a gateway.

10

5. The apparatus of Claim 1, wherein the first network element implements a communications protocol that is selected from a group of protocols consisting of:

- an interior gateway routing protocol (IGRP);
- 15 an enhanced IGRP (EIGRP);
- non-stop forwarding (NSF) protocol;
- multi-protocol label switching (MPLS) protocol;
- intermediate system-to-intermediate system (IS-IS) protocol;
- 20 express forwarding (EF) protocol;
- open shortest path first (OSPF) protocol; and
- stateful switch over (SSO) protocol.

6. The apparatus of Claim 1, wherein the routing
25 information is communicated by the second network element in response to a change in a third network element that is operable to communicate with the second network element.

7. The apparatus of Claim 1, wherein the routing information includes link state advertisements, requests, and updates, and wherein the data exchange associated with the adjacency protocol includes an exchange of
5 database descriptors (DBDs).

8. A method for reducing information propagating in a network environment, comprising:

gleaning routing information being communicated by a first network element, the routing information being
5 stored such that it may be accessed; and

executing an adjacency protocol between the first network element and a second network element that allows for a data exchange between the first and second network elements, wherein the first network element does not
10 communicate the routing information gleaned by the second network element during the data exchange associated with the adjacency protocol.

9. The method of Claim 8, further comprising:

15 accessing the routing information in order to make a comparison such that the routing information gleaned by the second network element during the data exchange associated with the adjacency protocol is not communicated to the second network element.

20

10. The method of Claim 8, further comprising:

verifying the routing information with the first network element such that verified information may be stored in a general database.

11. The method of Claim 8, further comprising:
implementing a communications protocol in the second
network element, the communications protocol being
selected from a group of protocols consisting of:
- 5 an interior gateway routing protocol (IGRP);
 an enhanced IGRP (EIGRP);
 non-stop forwarding (NSF) protocol;
 multi-protocol label switching (MPLS) protocol;
 intermediate system-to-intermediate system (IS-IS)
10 protocol;
 express forwarding (EF) protocol;
 open shortest path first (OSPF) protocol; and
 stateful switch over (SSO) protocol.
- 15 12. The method of Claim 8, further comprising:
 communicating the routing information in response to
a change in a third network element that is operable to
communicate with the first network element.

13. A system for reducing information propagating in a network environment, comprising:

means for gleaning routing information being communicated by a first network element, the routing
5 information being stored such that it may be accessed;
and

means for executing an adjacency protocol between the first network element and a second network element that allows for a data exchange between the first and
10 second network elements, wherein the first network element does not communicate the routing information gleaned by the second network element during the data exchange associated with the adjacency protocol.

15 14. The system of Claim 13, further comprising:

means for accessing the routing information in order to make a comparison such that the routing information gleaned by the second network element during the data exchange associated with the adjacency protocol is not
20 communicated to the second network element.

15. The system of Claim 13, further comprising:

means for verifying the routing information with the first network element such that verified information may
25 be stored in a general database.

16. The system of Claim 13, further comprising:
means for implementing a communications protocol in
the second network element, the communications protocol
being selected from a group of protocols consisting of:

5 an interior gateway routing protocol (IGRP);
an enhanced IGRP (EIGRP);
non-stop forwarding (NSF) protocol;
multi-protocol label switching (MPLS) protocol;
intermediate system-to-intermediate system (IS-IS)
10 protocol;
express forwarding (EF) protocol;
open shortest path first (OSPF) protocol; and
stateful switch over (SSO) protocol.

15 17. The system of Claim 13, further comprising:
means for communicating the routing information in
response to a change in a third network element that is
operable to communicate with the first network element.

18. Software for reducing information propagating in a network environment, the software being embodied in a computer readable medium and comprising computer code such that when executed is operable to:

5 glean routing information being communicated by a first network element, the routing information being stored such that it may be accessed; and

execute an adjacency protocol between the first network element and a second network element that allows
10 for a data exchange between the first and second network elements, wherein the first network element does not communicate the routing information gleaned by the second network element during the data exchange associated with the adjacency protocol.

15

19. The medium of Claim 18, wherein the code is further operable to:

access the routing information in order to make a comparison such that the routing information gleaned by
20 the second network element during the data exchange associated with the adjacency protocol is not communicated to the second network element.

20. The medium of Claim 18, wherein the code is
25 further operable to:

verify the routing information with the first network element such that verified information may be stored in a general database.

21. The medium of Claim 18, wherein the code is further operable to:

communicate the routing information in response to a change in a third network element that is operable to
5 communicate with the first network element.